T. Finkelstein, Y. Shapira, N. Vaskar Bechor, N. Shpack

Fused and Geminated Permanent Maxillary Central Incisors – Prevalence, Treatment Options and Outcome in Orthodontic Patients. Journal of Dentistry for Children, Vol. 82(3), pp. 147-152, 2015

Purpose: Developmental disturbances during tooth formation may cause abnormalities in tooth size and shape, resulting in poor dental and facial esthetics. The purpose of this study was to evaluate the prevalence of fused/geminated teeth in the maxillary anterior region of orthodontically treated patients, and present treatment options and their outcome. Methods: Pre- and post-treatment facial and intraoral photographs, study models, and panoramic and periapical radiographs of 574 consecutively treated patients (mean age: 13.3 years) from the orthodontic department were examined for the presence of fusion or gemination in the maxillary anterior region. Results: There were eight patients (1.4 percent) with fused/geminated teeth in the maxillary anterior region. Conclusions: The prevalence found is relatively high compared to previous reports. Esthetic consideration is a determining factor for various treatment alternatives. A multidisciplinary approach is imperative for the successful treatment of these dental abnormalities.